MOBILE APPLICATION DEVELOPMENT

Lecture 5

Let’s start working on android application development

P.S. you all must have installed all the packages as instructed in previous class (lecture 3 and 4)

Task 1:

Start working with Android Studio, define project, activity and display Hello World (as done in the previous task)

Task 2:

Play with the main activity (screen) in design view, do change the text to IQRA UNIVERSITY, goto properties on the right side column to change its background color (make it blue), now try to change the background color of main activity, again refer to the properties column

Task 3:

From Text Fields menu, Add 2 number text boxes (say eText1 and eText2), add a Plain Text(say textView), you may say ADDITION, add a button as well and title it something like SUM or ADD

Go to Java folder, select mainactivity class, define your public function under subclass of ActionBarActivity:

public void onButtonClick (View v) //place your cursor on View, press ALT + ENTER -> Select Import Class

{

EditText v1 = (EditText) findViewById(R.id.eText1);

EditText v2 = (EditText) findViewById(R.id.eText2);

TextView t= (TextView) findViewById(R.id.textView);

// converting values into integers

int p1 = Integer.parseInt(v1.getText().toString());

int p2 = Integer.parseInt(v2.getText().toString());

int sum = p1 + p2;

//setting the result to textview

t.setText(Integer.toString(sum));

}

Goto design view again, Select your Button "SUM" or "Add" -> navigate properties to find onClick, Select dropdown and select your function onButtonClick, Run your application, enter values and check result

Task 4:

Add 2 Number Text boxes, one textlabel, and a buttons for remaining basic arithmetic operations (individually) that are -, \*, /

define your public functions that will be performing the relevant operation as selected by user on the emulator to show the result

Task 5:

Simple Calculator:

Now try to merge all the operations under one activity by Adding 2 Number Text boxes, one textlabel, and 4 buttons for basic arithmetic operations that are -, \*, /

Do change the background colors to make it attractive, change the Font on button if you want,

define your public function that will be performing the relevant operation as selected by user on the emulator to show the result

Task 6:

Compute percentage:

Take 4 values as input from the users (in number text boxes) and try to display the percentage if user clicks the event.

//you will be needing to add 4 number boxes, a plain textbox, and a button, define the public function to calculate the percentage.

Task 7:

Add a button to your activity, in properties change the layoutwidht and layout height from wrapcontent to fill parent to observe the change

(Basically it will stretch the width or height as selected to to width or height of frame)

Now from the Text Field Menu, select Password to add it to your activity

Task 8:

Add and adjust images now to your application:

Select Widgets Menu -> Image View -> copy any image from your local disk, right click copy, goto android studio again, from the packages menu select folder res -> drawable folder - >right click and paste, name it and save.

Now goto properties, select src, select drawable tab - > select filename - >adjust the alignment